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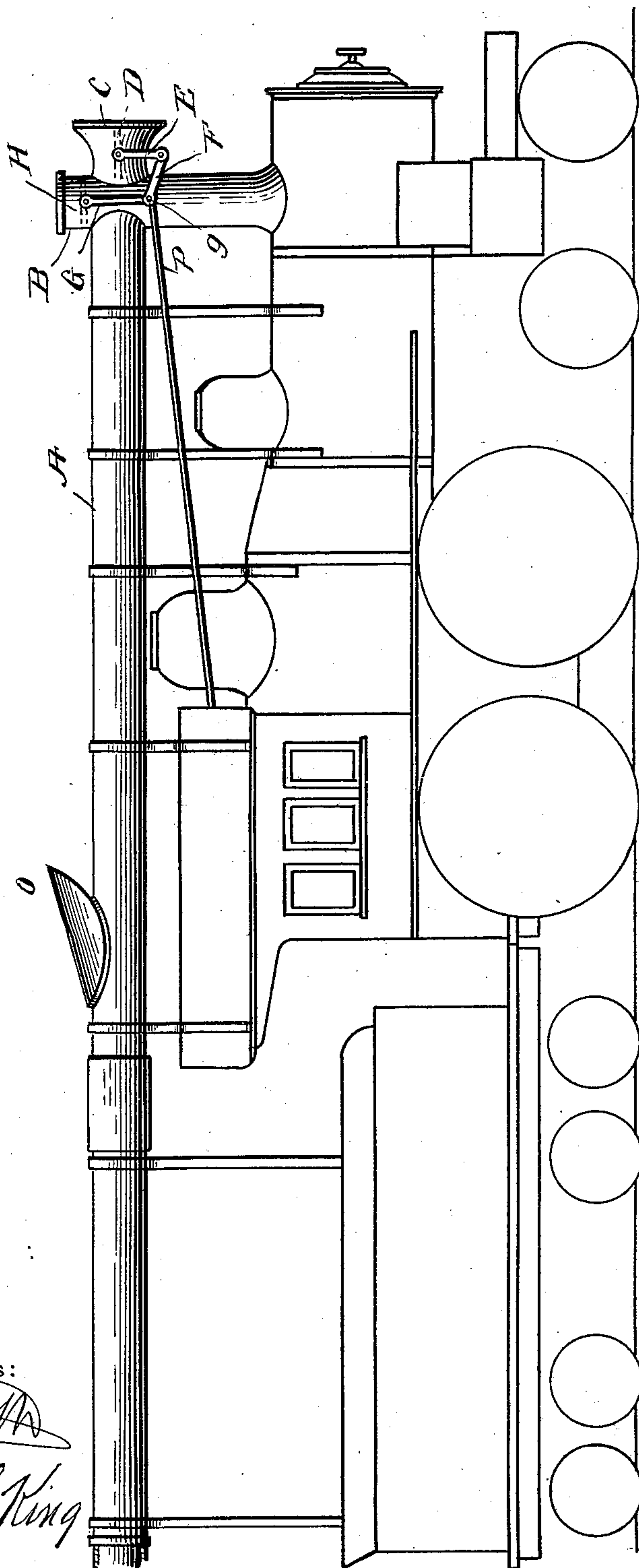
4 Sheets—Sheet 1.

M. J. WYATT.
SMOKE AND CINDER CONVEYER.

No. 564,298.

Patented July 21, 1896.

Fig. 1.



Witnesses:

[Signature]
Russell King

Mary J. Wyatt
Inventor.

By
Chas. E. Burton
Attorney.

(No Model.)

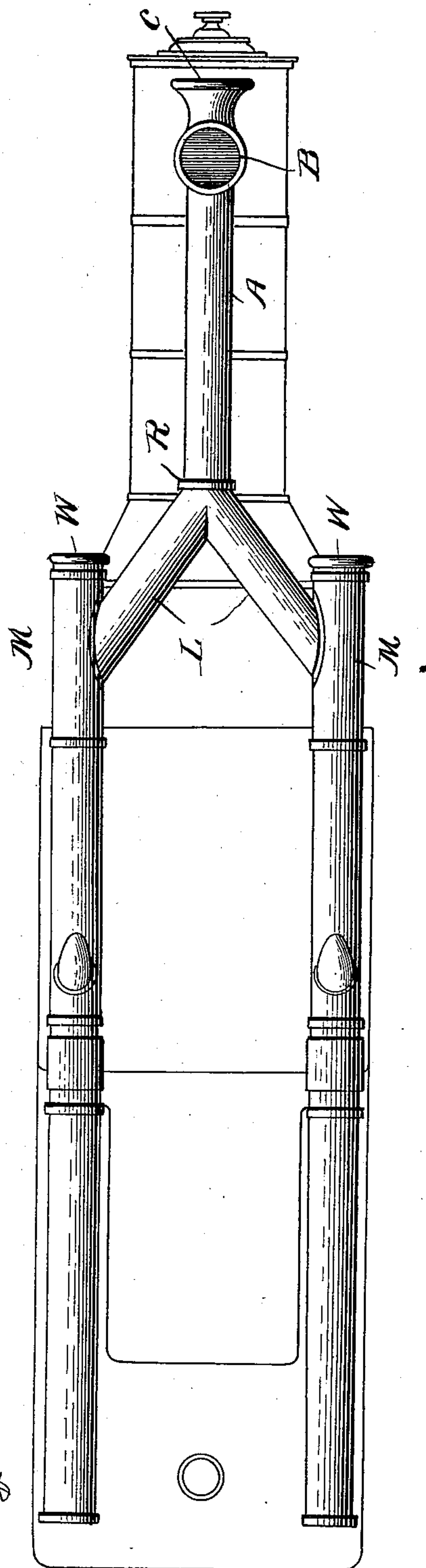
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SMOKE AND CINDER CONVEYER.

No. 564,298.

Patented July 21, 1896.

Fig. 2-



Witnesses:

W. K. North
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(No Model.)

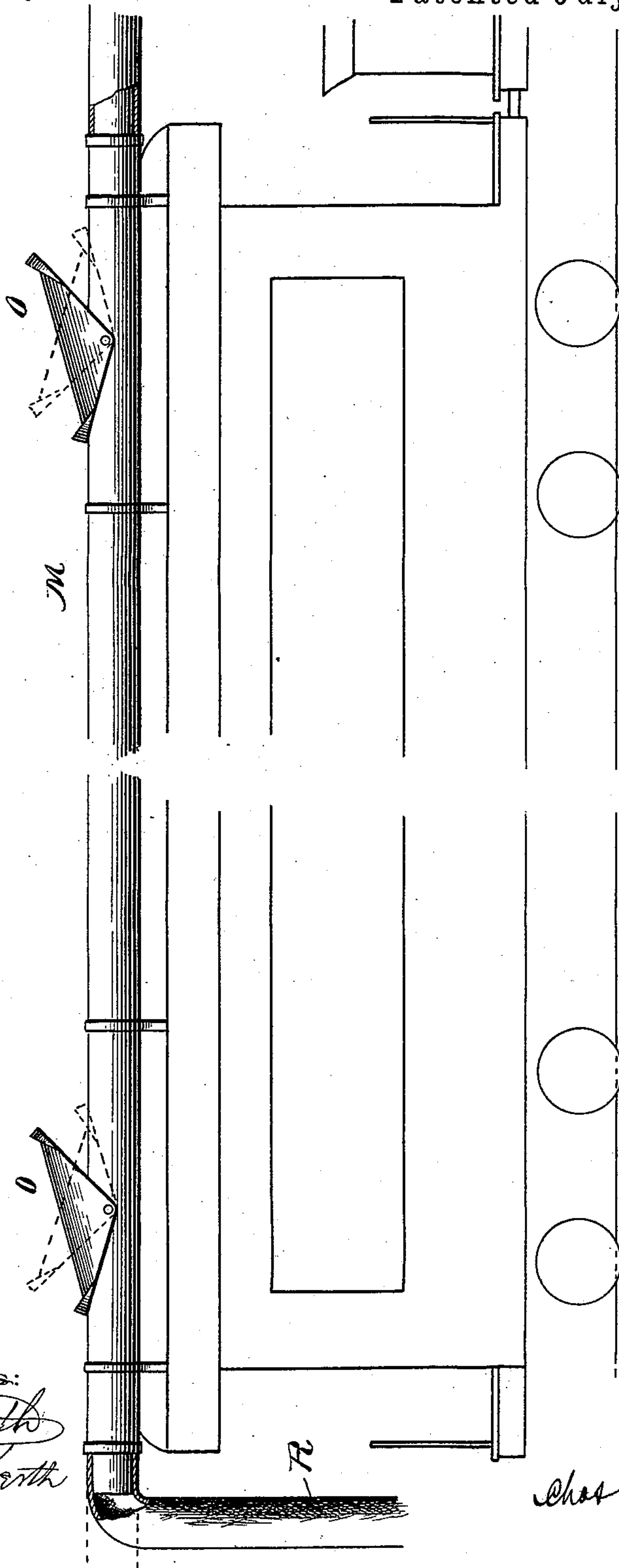
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M. J. WYATT.
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Patented July 21, 1896.

Fig. B.



Witnesses:

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(No Model.)

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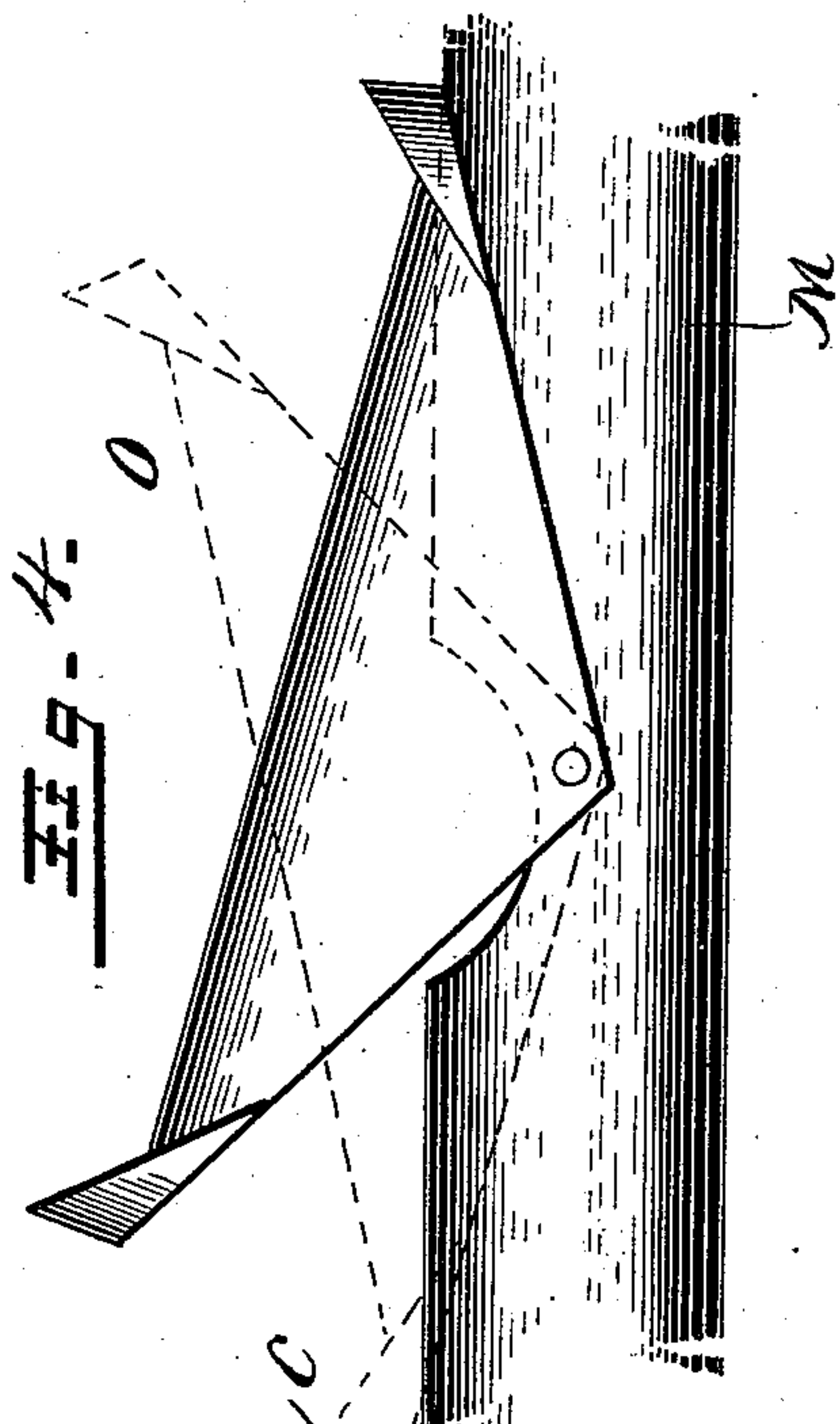


Fig. 5.

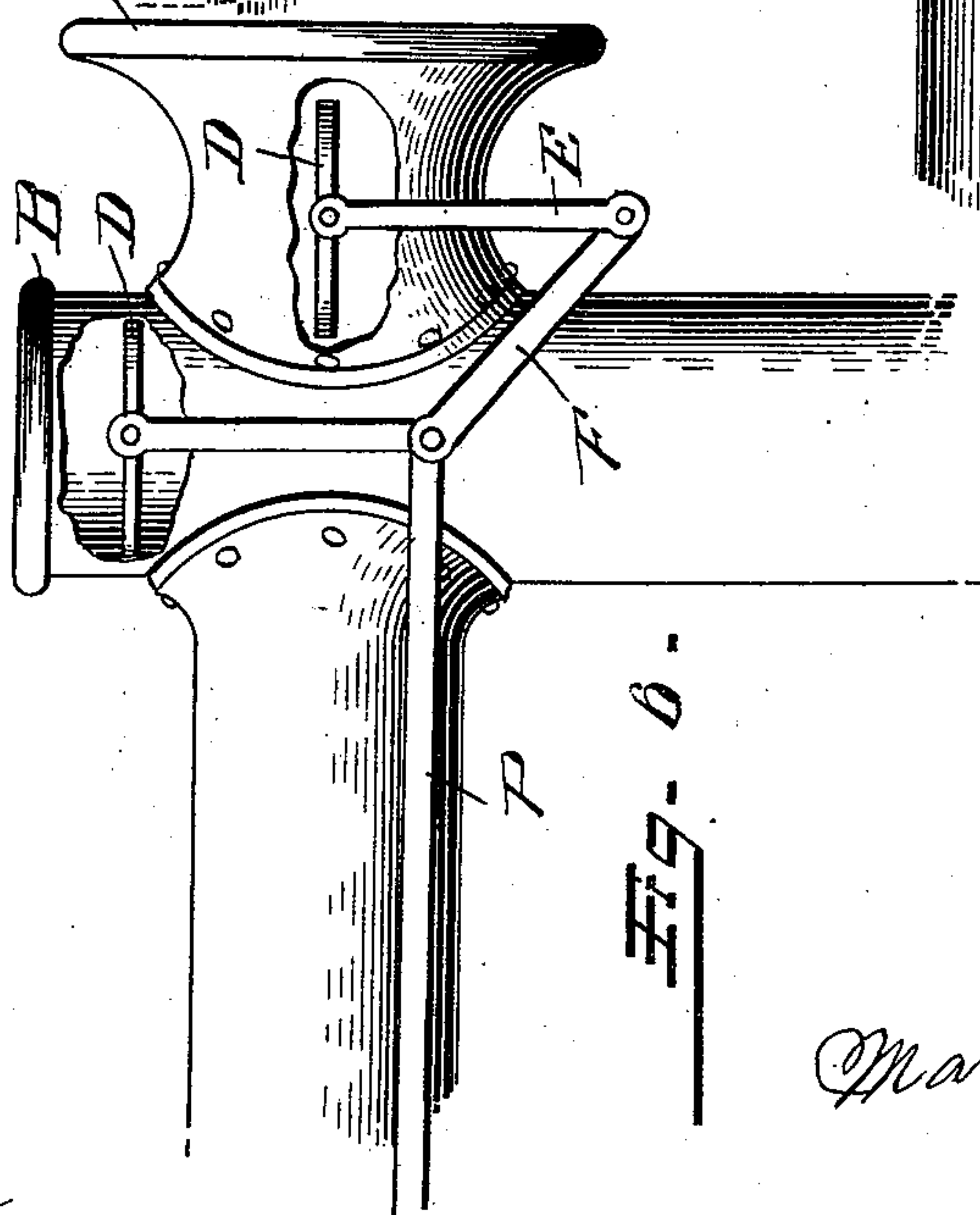
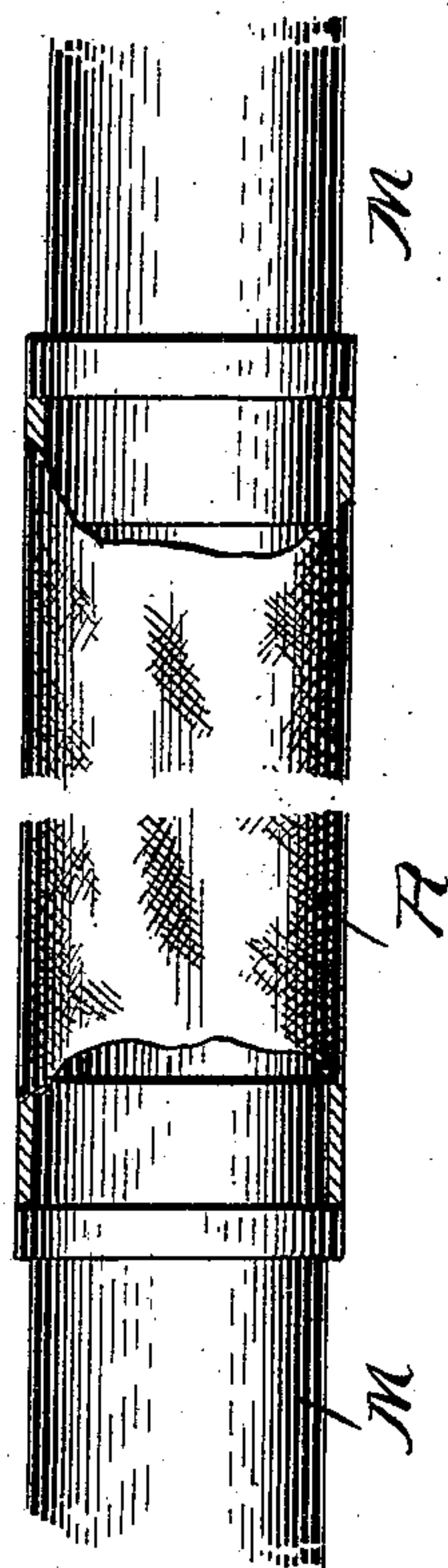


Fig. 6.

Witnesses:

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Mary J. Wyatt
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by
Chas. E. Barker
Attorney.

UNITED STATES PATENT OFFICE.

MARY J. WYATT, OF RALEIGH, NORTH CAROLINA.

SMOKE AND CINDER CONVEYER.

SPECIFICATION forming part of Letters Patent No. 564,298, dated July 21, 1896.

Application filed January 4, 1896. Serial No. 574,347. (No model.)

To all whom it may concern:

Be it known that I, MARY J. WYATT, a citizen of the United States, residing at Raleigh, in the county of Wake and State of North Carolina, have invented certain new and useful Improvements in Smoke and Cinder Conveyers for Steam-Railway Trains, of which the following is so full, clear, and exact a description as will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of the locomotive and tender provided with my invention. Fig. 2 is a top plan view of the same, showing a conveyer extending back over the tender and showing its position when in use. Fig. 3 is a side elevation of a coach, showing my conveyer in position. Fig. 4 is a detail of a portion of the conveyer, showing an automatic valve and deflector for admitting air to the conveyer. Fig. 5 is a detail section of one of the pipes. Fig. 6 is a detail in elevation of my conveyer, showing its connection with the smoke-stack and showing valves for controlling the direction of the draft.

The object of my invention is to provide a device by the use of which the smoke and cinders from a locomotive may be conveyed back the entire length of the train, where they may be dropped along the track or collected and deposited from time to time at will, whichever seems most desirable to the railroad company.

Another object of my invention is to provide a device by the use of which prairie fires, burning of timber, and the destruction of such sections of country, as well as the destruction of the track and telegraph poles and railroad-fences, may be entirely obviated.

Another object of my invention is to construct a device by the use of which the disastrous effects of the accumulation of cinders, products of combustion, and smoke on the top of cars, on their floors, upholstery, and running-gear may be entirely obviated or at least reduced to a minimum.

With these objects in view, I provide a pipe A, which is connected with a smoke-stack B, and runs back to the rear of the tender. In direct alinement with this pipe A is a funnel-shaped inlet C, secured to the front of the

smoke-stack. Within the funnel-shaped inlet I provide a valve D, operated by a lever E, pivotally connected with a second lever F. A third lever G is pivoted to the lever F at *g*, and is also secured to the second valve H in the upper portion of the smoke-stack above the line of the pipe A. The pipe A extends back to the point K, where it is provided with branches L L, forming a Y, the rear ends of the pipes L L connected with pipes M M at either side of the top of the cab, tender, and coaches. The pipes M M are open at N, forming an inlet for the air. Deflectors or inlet-valves O O are provided along the top of the pipes M M. These are pivotally secured to the pipes M M, and are automatic in their action and will be opened by the action of the air, creating a draft into and through the pipes M M. Each deflector is provided with an upturned lip *a a* at either end, which, by reason of its resistance to the current of the air, will cause the valve to open. The pipes M M are connected together between the cars and between the car and the tender by flexible joints, which may be made by securing the sections of pipe together telescopically, or they may be made by securing, by bands or rings, sections of flexible pipe between the rigid pipes on the train. Any suitable material may be used for this purpose, and I suggest asbestos as the most likely to be suitable for the purpose.

A rod P operates the valves in the smoke-stack at the front and at the top simultaneously, either opening the smoke-stack at the front and closing it at the top, or opening it at the top and closing it at the front. When the train is at a standstill or just starting out, the valves should be turned so as to close the front and open the top, and as soon as the train gets in motion under fair headway, the position of the valves should be reversed. Air will rush into the funnel-shaped opening in the front of the smoke-stack and across the smoke-stack into the pipe A, thence through the branches into the pipes M M, along the top of the train, and air will enter the pipes M M at their front ends and also through openings beneath the deflectors, which open automatically. At the rear end of the train the pipe is dropped down so that the cinders will fall along the line of the track, or they

may be allowed to accumulate in the section Q at the rear end of the train, and they may be deposited at will at any desired place along the road.

5 The pipes are secured to the top of the locomotive and tender and cars by suitable brackets of metal, or may be fastened in any way which may be found advisable and expedient.

10 It is obvious that many of the minor details of construction may be varied and mechanical equivalents substituted for the devices which I have shown and described without departing from the spirit of my invention
15 and without in any way interfering with its usefulness.

What I desire to secure by Letters Patent of the United States, and what I believe to be my invention, and therefore wish to claim, is—

20 The combination with the smoke-stack, the

funnel and valves of the pipe leading backward from the smoke-stack, the lateral branches connected with the side pipes back of their forward ends and the side pipes connected therewith, the latter being open at 25 their forward ends the entire full area of the inside of the pipe being clear and uninterrupted and in direct and uninterrupted communication with outside air to admit air, and means for operating the said valves simultaneously by a single movement of an operating-rod opening one valve and closing the 30 other and vice versa, substantially as specified.

In testimony whereof I affix my signature 35 in the presence of two witnesses.

MARY J. WYATT.

Witnesses:

JOHN C. SCARBOROUGH,
W. F. WYATT.